

DAC
BOT-588

PTO/SB/21 (09-04)

Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission 36

Application Number
09/831,621

Filing Date
May 10, 2001

JAN 24 2006

First Named Inventor
BAUM et al.

Art Unit
To be determined

OFFICE OF PETITIONS

Examiner Name
To be determined

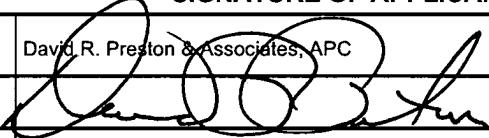
Attorney Docket Number
NEU-00119.P.1

RECEIVED

ENCLOSURES (Check all that apply)

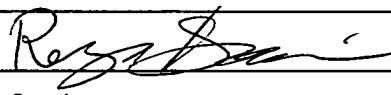
<input checked="" type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance Communication to TC
<input checked="" type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment/Reply	<input checked="" type="checkbox"/> Petition	<input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Change of Correspondence Address	<input checked="" type="checkbox"/> Other Enclosure(s) (please Identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Terminal Disclaimer	1. Copy of Acceptance of Power of Attorney
<input type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> Request for Refund	2. Response to Notification of Missing Req.
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> CD, Number of CD(s) _____	3. Declaration
<input checked="" type="checkbox"/> Reply to Missing Parts/ Incomplete Application	<input type="checkbox"/> Landscape Table on CD	4. Sequence Listing (paper and diskette)
<input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Remarks Also enclosed, 5. Statement under 37 CFR 1.821 6. Postcard	

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	David R. Preston & Associates, APC		
Signature			
Printed name	David R. Preston		
Date	1/17/06	Reg. No.	38,710

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

Signature			
Typed or printed name	Reza Savari	Date	1-17-06

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



PTO/SB/64 (07-05)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PETITION FOR REVIVAL OF AN APPLICATION FOR PATENT ABANDONED UNINTENTIONALLY UNDER 37 CFR 1.137(b)	Docket Number (Optional) NEU-00119.P.1
--	---

First named inventor: BAUM et al.

Application No.: 09/831,621

Art Unit: To be determined #10

Filed: May 10, 2001

Examiner: To be determined

Title: NOVEL DNAs AND POLYPEPTIDES

RECEIVED

RECEIVED

22 FEB 2006

JAN 24 2006

Legal Staff
International Division

OFFICE OF PETITIONS

Attention: Office of Petitions
Mail Stop Petition
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450
FAX (571) 273-8300

NOTE: If information or assistance is needed in completing this form, please contact Petitions Information at (571) 272-3282.

The above-identified application became abandoned for failure to file a timely and proper reply to a notice or action by the United States Patent and Trademark Office. The date of abandonment is the day after the expiration date of the period set for reply in the office notice or action plus an extensions of time actually obtained.

APPLICANT HEREBY PETITIONS FOR REVIVAL OF THIS APPLICATION

NOTE: A grantable petition requires the following items:

- (1) Petition fee;
- (2) Reply and/or issue fee;
- (3) Terminal disclaimer with disclaimer fee - required for all utility and plant applications filed before June 8, 1995; and for all design applications; and
- (4) Statement that the entire delay was unintentional.

1. Petition fee

Small entity fee \$ 750.00 (37 CFR 1.17(m)). Applicant claims small entity status. See 37 CFR 1.27.

Other than small entity - fee \$ _____ (37 CFR 1.17(m))

2. Reply and/or fee

A. The reply and/or fee to the above-noted Office action in the form of Declaration and Sequence Listing (paper copy and diskette) (identify type of reply):

has been filed previously on _____.
 is enclosed herewith.

B. The issue fee and publication fee (if applicable) of \$ _____.

has been paid previously on _____.
 is enclosed herewith.

[Page 1 of 2]

This collection of information is required by 37 CFR 1.137(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

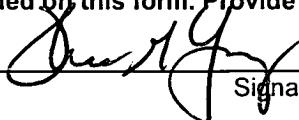
3. Terminal disclaimer with disclaimer fee

Since this utility/plant application was filed on or after June 8, 1995, no terminal disclaimer is required.

A terminal disclaimer (and disclaimer fee (37 CFR 1.20(d)) of \$ _____ for a small entity or \$ _____ for other than a small entity) disclaiming the required period of time is enclosed herewith (see PTO/SB/63).

4. STATEMENT: The entire delay in filing the required reply from the due date for the required reply until the filing of a grantable petition under 37 CFR 1.137(b) was unintentional. [NOTE: The United States Patent and Trademark Office may require additional information if there is a question as to whether either the abandonment or the delay in filing a petition under 37 CFR 1.137(b) was unintentional (MPEP 711.03(c), subsections (III)(C) and (D)).]

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.



Signature

1-11-06

Date

Dr. Warren Young

Typed or printed name

Registration Number, if applicable

Neurome, Incorporated

Address

858-677-0466

Telephone Number

11149 North Torrey Pines Rd. Suite 100, San Diego, CA 92037-1031

Address

Enclosures: Fee Payment Reply Terminal Disclaimer Form Additional sheets containing statements establishing unintentional delay Other: Declaration, Sequence Listing (paper copy and diskette), and Postcard

CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR 1.8(a)]

I hereby certify that this correspondence is being:

Deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop Petition, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

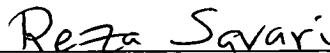
Transmitted by facsimile on the date shown below to the United States Patent and Trademark Office as (571) 273-8300.

1-17-06

Date



Signature



Reza Savari

Typed or printed name of person signing certificate

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

JAN 20 2006
O I P E 1450
Effective on 12/08/2004.
Fee Pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).**FEET TRANSMITTAL
For FY 2005** Applicant claims small entity status. See 37 CFR 1.27**TOTAL AMOUNT OF PAYMENT** (\$ 750.00)**Complete if Known**

Application Number	09/831,621
Filing Date	May 10, 2001
First Named Inventor	BAUM et al.
Examiner Name	To be determined
Art Unit	To be determined
Attorney Docket No.	NEU-00119.P.1

METHOD OF PAYMENT (check all that apply)

Check Credit Card Money Order None Other (please identify): _____

Deposit Account Deposit Account Number: 501321 Deposit Account Name: David R. Preston & Assoc.

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

Charge fee(s) indicated below Charge fee(s) indicated below, except for the filing fee

Charge any additional fee(s) or underpayments of fee(s) Credit any overpayments

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

FEE CALCULATION**1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

<u>Application Type</u>	<u>FILING FEES</u>		<u>SEARCH FEES</u>		<u>EXAMINATION FEES</u>		<u>Fees Paid (\$)</u>
	<u>Fee (\$)</u>	<u>Small Entity</u>	<u>Fee (\$)</u>	<u>Small Entity</u>	<u>Fee (\$)</u>	<u>Small Entity</u>	
Utility	300	150	500	250	200	100	_____
Design	200	100	100	50	130	65	_____
Plant	200	100	300	150	160	80	_____
Reissue	300	150	500	250	600	300	_____
Provisional	200	100	0	0	0	0	_____

2. EXCESS CLAIM FEES**Fee Description**

Each claim over 20 (including Reissues)

Each independent claim over 3 (including Reissues)

Multiple dependent claims

<u>Total Claims</u>	<u>Extra Claims</u>	<u>Fee (\$)</u>	<u>Fee Paid (\$)</u>	<u>Small Entity</u>	<u>Fee (\$)</u>
- 20 or HP =	x	=		50	25

HP = highest number of total claims paid for, if greater than 20.

<u>Indep. Claims</u>	<u>Extra Claims</u>	<u>Fee (\$)</u>	<u>Fee Paid (\$)</u>	<u>Multiple Dependent Claims</u>	<u>Fee (\$)</u>	<u>Fee Paid (\$)</u>
- 3 or HP =	x	=		200	100	360

HP = highest number of independent claims paid for, if greater than 3.

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

<u>Total Sheets</u>	<u>Extra Sheets</u>	<u>Number of each additional 50 or fraction thereof</u>	<u>Fee (\$)</u>	<u>Fee Paid (\$)</u>
- 100 =	/ 50 =	(round up to a whole number) x	=	

4. OTHER FEE(S)

Non-English Specification \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): Petition to revive unintentionally abandoned application

Fees Paid (\$)

\$750.00

SUBMITTED BY

Signature	Registration No. 38,710 (Attorney/Agent)	Telephone 858-724-0375
Name (Print/Type)	David R. Preston	Date 1/17/06

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

~~TRADEMA~~ Effective on 12/08/2004.
Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

FEE TRANSMITTAL For FY 2005

Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 750.00)

Complete if Known

Application Number	09/831,621
Filing Date	May 10, 2001
First Named Inventor	BAUM et al.
Examiner Name	To be determined
Art Unit	To be determined
Attorney Docket No.	NEU-00119.P.1

METHOD OF PAYMENT (check all that apply)

Check Credit Card Money Order None Other (please identify): _____
 Deposit Account Deposit Account Number: 501321 Deposit Account Name: David R. Preston & Assoc.

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

Charge fee(s) indicated below Charge fee(s) indicated below, except for the filing fee
 Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 Credit any overpayments

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	_____
Design	200	100	100	50	130	65	_____
Plant	200	100	300	150	160	80	_____
Reissue	300	150	500	250	600	300	_____
Provisional	200	100	0	0	0	0	_____

2. EXCESS CLAIM FEES

Fee Description

	Small Entity Fee (\$)
Each claim over 20 (including Reissues)	50 25
Each independent claim over 3 (including Reissues)	200 100
Multiple dependent claims	360 180

Total Claims Extra Claims Fee (\$) Fee Paid (\$) Multiple Dependent Claims
- 20 or HP = x = Fee (\$) Fee Paid (\$)

HP = highest number of total claims paid for, if greater than 20.

Indep. Claims Extra Claims Fee (\$) Fee Paid (\$) Multiple Dependent Claims
- 3 or HP = x = Fee (\$) Fee Paid (\$)

HP = highest number of independent claims paid for, if greater than 3.

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets Extra Sheets Number of each additional 50 or fraction thereof Fee (\$) Fee Paid (\$)
- 100 = / 50 = (round up to a whole number) x =

4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): Petition to revive unintentionally abandoned application

\$750.00

SUBMITTED BY

Signature		Registration No. 38,710 (Attorney/Agent)	Telephone 858-724-0375
Name (Print/Type)	David R. Preston		

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



#10

Patent
Docket Number: NEU-00119.P.1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:)
BAUM et al.)
Application No.: 09/831,621)
Filed: May 10, 2001)
For: NOVEL DNAs AND)
POLYPEPTIDES)

Examiner: To be determined

Art Unit: To be determined

RECEIVED

JAN 24 2006

OFFICE OF PETITIONS

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE TO NOTIFICATION OF MISSING REQUIREMENTS

**PETITION FOR REVIVAL OF AN APPLICATION FOR PATENT ABANDONED
UNINTENTIONALLY UNDER 37 C.F.R. § 1.137 (b)**

Sir:

Applicants are responding to the Notification of Missing Requirements mailed on August 13, 2001, notifying Applicants that a proper Oath or Declaration along with computer readable form of the Sequence Listing must be provided. Applicants submit herewith, a previously signed copy of the Declaration along with a copy of the Sequence Listing in paper copy and computer readable format, along with a Statement under 35 C.F.R. § 1.821. Please note that the Declaration was signed in 2001 and a new Power of Attorney was accepted by the USPTO in 2005 as shown in the enclosed Notice of Acceptance of Power of Attorney.

Applicants also submit herewith, a Petition for Revival of an Application for Patent Abandoned Unintentionally under 37 CFR §1.137(b), along with a fee of \$750.00.

Please apply any charges not covered, or any credits, to Deposit Account 501321 in the name of David R. Preston & Associates having Customer No.: 24232.

Respectfully submitted,



David R. Preston
Reg. No. 38,710

Date: Jan 17, 2006

David R. Preston & Associates, A.P.C.
12625 High Bluff Drive
Suite 205
San Diego, CA 92130

Telephone: 858.724.0375
Facsimile: 858.724.0384



Case No.: 98,664-B

RECEIVED

JAN 24 2006

OFFICE OF PETITIONS

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Novel DNAs and Polypeptide

the specification of which is attached hereto unless the following space is checked:

was filed on May 10, 2001 (I.A. Filing Date: November 10, 1999) as United States Application Serial Number 09/831,621.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT international application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s):

	<u>Number</u>	<u>Country</u>	<u>Day/Month/Year Filed</u>
1.			
2.			

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below:

	<u>Application Number</u>	<u>Filing Date</u>
1.	60/107,821	November 10, 1998
2.		

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s), or § 365(c) of any PCT international application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

	<u>Application Number</u>	<u>Filing Date</u>	<u>Status: patented, pending, abandoned</u>
1.	PCT/US99/26788	November 10, 1999	Abandoned
2.			

I hereby appoint the practitioners associated with the Customer Number provided below to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith, and I direct that all correspondence be addressed to that Customer Number.

Customer Number: 020306

Principal attorney or agent: Roger P. Zimmerman

Telephone number: 312-913-0001

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of first inventor: Peter Robert Baum

Inventor's signature: Peter Robert Baum

Date: 10.3.2001

Residence: Seattle, Washington

Citizenship: United States of America

Post Office Address: 6027 34th Avenue N.E., Seattle, Washington 98115

Full name of second joint inventor: Robert Finley DuBose

Inventor's signature: Robert Finley DuBose

Date: 10.2.2001

Residence: Bellevue, Washington

Citizenship: United States of America

Post Office Address: 6151 156th Place Southeast, Bellevue, Washington 98006

Full name of third joint inventor: John E. Sims

Inventor's signature: John E. Sims

Date: 10.2.2001

Residence: Seattle, Washington

Citizenship: United States of America

Post Office Address: 4207 43rd Avenue Northeast, Seattle, Washington 98105

Full name of fourth joint inventor: Adel Youakim

Inventor's signature: Adel Youakim

Date: 10.2.2001

Residence: Seattle, Washington

Citizenship: Canada

Post Office Address: 1940 Bonair Dr. S.W., Seattle, Washington 98116

Full name of fifth joint inventor: Karl W. Hasel

Inventor's signature: Karl W. Hasel

Residence: Solana Beach, California

Citizenship: Switzerland

Post Office Address: 247 South Nardo Avenue, Solana Beach, California 92075

Date: Sept 4th, 2001

Full name of fourth joint inventor: Brian S. Hilbush

Inventor's signature: Brian S. Hilbush

Residence: San Diego, California

Citizenship: United States of America

Post Office Address: 5690 Willowmere Lane, San Diego, California 92130

Date: September 4th, 2001

4628

- 3 -



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents, Box PCT
United States Patent and Trademark Office
Washington, D.C. 20231
www.uspto.gov

U.S. APPLICATION NO.		FIRST NAMED APPLICANT	ATTY. DOCKET NO.
09/831621		BAUM	P 98,664-B
		INTERNATIONAL APPLICATION NO.	
		PCT/US99/26788	
		LA. FILING DATE	PRIORITY DATE
		10 NOV 99	10 NOV 98

DATE MAILED: 13 AUG 2001

NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

1. The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated Office (37 CFR 1.494) an Elected Office (37 CFR 1.495):

<input checked="" type="checkbox"/> U.S. Basic National Fee.	<input checked="" type="checkbox"/> Indication of Small Entity Status.
<input checked="" type="checkbox"/> Copy of the international application.	<input type="checkbox"/> Translation of the international application into English.
<input type="checkbox"/> Oath or Declaration of inventors(s).	<input type="checkbox"/> Translation of Article 19 amendments into English.
<input type="checkbox"/> Copy of Article 19 amendments.	<input type="checkbox"/> Other:
<input type="checkbox"/> Priority Document.	
<input type="checkbox"/> The International Preliminary Examination Report in English and its Annexes, if any.	
<input type="checkbox"/> Translation of Annexes to the International Preliminary Examination Report into English.	

2. Applicant has requested early processing under 35 U.S.C. 371(f) but has not filed the following indicated items and/or the indicated items in paragraph 3 below. The Basic National Fee and the copy of the international application must be filed prior to 20 or 30 months from the priority date to avoid abandonment.

<input type="checkbox"/> U.S. Basic National Fee.	<input type="checkbox"/> Copy of the international application.
---	---

3. The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

a. Translation of the application into English. A processing fee will be required if submitted later than the appropriate 20 or 30 months from the priority date.
<input type="checkbox"/> The current translation is defective for the reasons indicated on the attached Notice of Defective Translation.
b. Processing fee for providing the translation of the application and/or the Annexes later than the appropriate 20 or 30 months from the priority date (37 CFR 1.492(f)).
<input checked="" type="checkbox"/> c. Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), properly identifying the application (preferably by the International application number and international filing date). A surcharge will be required if submitted later than the appropriate 20 or 30 months from the priority date.
<input type="checkbox"/> The current oath or declaration does not comply with 37 CFR 1.497(a) and (b) for the reasons indicated on the attached PCT/DO/EO/917.
<input type="checkbox"/> d. Surcharge for providing the oath or declaration later than the appropriate 20 or 30 months from the priority date (37 CFR 1.492(e)).

4. Additional claim fees of \$ _____ as a large entity small entity, including any required multiple dependent claim fee, are required. Applicant must submit the additional claim fees or cancel the additional claims for which fees are due (37 CFR 1.492(g)). See attached PTO-875.

5. Applicant has not submitted the required sequence listing pursuant to 37 CFR 1.821-1.825. See attached PCT/DO/EO/920.

ALL OF THE ITEMS SET FORTH IN 3(a)-3(d), 4 AND 5 ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 22 OR 32 MONTHS (where 37 CFR 1.495 applies) FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

6. If box 3a or 3c is checked, a translation of the Annexes **MUST** be submitted no later than the time period set above or the Annexes will be cancelled. A processing fee will be required if submitted later than 20 or 30 months from the priority date.

7. The Article 19 amendments are cancelled since a translation was not provided by the appropriate 20 (37 CFR 1.494(d)) or 30 (37 CFR 1.495(d)) months from the priority date.

Applicant is reminded that any communication to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above. (37 CFR 1.5)

*A copy of this notice **MUST** be returned with this response.*

Enclosed: PCT/DO/EO/917
 PTO-875

Notice of Defective Translation
 PCT/DO/EO/920

SHELBY VIGIL, PARALEG

Telephone: 703-305-3653



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents, Box PCT
United States Patent and Trademark Office
Washington, D.C. 20231
www.uspto.gov

U.S. APPLICATION NO.	FIRST NAMED APPLICANT		ATTY. DOCKET NO.
09/831621	BAUM		P 98,664-B
ROGER P ZIMMERMAN MCDONNELL BOEHNEN HULBERT & BERGHOFF 300 SOUT WACKER DRIVE SUITE 3200 CHICAGO, IL 60606			INTERNATIONAL APPLICATION NO.
			PCT/US99/26788
I.A. FILING DATE		PRIORITY DATE	
10 NOV 99		10 NOV 98	

DATE MAILED: 13 AUG 2001

**NOTIFICATION TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS
CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE
DISCLOSURES**

Applicant has submitted papers under 35 U.S.C. 371 to enter the national stage in the United States of America. The items indicated below, however, are missing. The period within which to correct the deficiency noted below and avoid abandonment is set forth in the accompanying Notification.

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CFR 1.821-1.825 for the following reason(s):

- The application fails to comply with the requirements of 37 CFR 1.821-1.825.
- This application does not contain, a "Sequence Listing" as a separate part of the disclosure on paper copy or compact disc, as required by 37 CFR 1.821(c).
- A copy of the "Sequence Listing" in computer readable format has not been submitted as required by 37 CFR 1.821(e).
- A copy of the "Sequence Listing" in computer readable form has been submitted. The content of the computer readable form, however, does not comply with the requirements of 37 CFR 1.822 and/or 1.832, as indicated on the attached marked-up copy of the "Raw Sequence Listing."
- The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A substitute computer readable form must be submitted as required by 37 CFR 1.825(d).
- The paper copy or compact disc of the "Sequence Listing" is not the same as the computer readable form of the "Sequence Listing" as required by 37 CFR 1.821(e).
- Other: _____

APPLICANT MUST PROVIDE:

- An initial or substitute computer readable form (CRF) of the "Sequence Listing."
- An initial or substitute paper copy or compact disc of the "Sequence Listing," as well as an amendment directing its entry into the specification.
- A statement that the contents of the paper or compact disc and the computer readable form are the same and, where applicable, include no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b) or 1.825(d).

FOR QUESTIONS REGARDING COMPLIANCE WITH THESE REQUIREMENTS, PLEASE
CALL:

- (703) 308-4216, for Rules interpretation,
- (703) 308-4212, for CRF submission help,
- (703) 287-0200, for PatentIn software help.

SHELBY VIGIL, PARALEG

Telephone: 703-305-3653



UNITED STATES PATENT AND TRADEMARK OFFICE

NEU-~~1~~ 119.7.1

UNITED STATES DEPARTMENT OF COMMERCE
 United States Patent and Trademark Office
 Address: COMMISSIONER FOR PATENTS
 P.O. Box 1430
 Alexandria, Virginia 22313-1450
 www.uspto.gov

APPLICATION NUMBER	FILING OR 371 (c) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
09/831,621	05/10/2001	Peter R Baum	98,664-B

CONFIRMATION NO. 6901

24232
 DAVID R PRESTON & ASSOCIATES APC
 12625 HIGH BLUFF DRIVE
 SUITE 205
 SAN DIEGO, CA 92130

OC000000016385642
 OC000000016385642

Date Mailed: 06/27/2005

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 05/09/2005.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

RECEIVED

JAN 24 2006

OFFICE OF PETITIONS

JAMES E. MASON
 1600 (571) 272-0539

ATTORNEY/APPLICANT COPY

RECEIVED
 JUN 29 2005
 BY



Patent
Docket Number: NEU-00119.P.1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:)
BAUM et al.) Examiner: To be determined
Application No.: 09/831,621) Art Unit: To be determined
Filed: May 10, 2001)
For: NOVEL DNAs AND)
POLYPEPTIDES)

RECEIVED

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

JAN 24 2006

OFFICE OF PETITIONS

Sir:

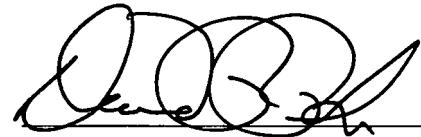
STATEMENT UNDER 37 C.F.R. 1.821 THROUGH 1.825

In accordance with the requirements under 37 C.F.R. 1.821 through 1.825 for patent applications containing nucleotide sequence and/or amino acid sequence disclosures, Applicants submit herewith a Written Sequence Listing and corresponding Computer-Readable Form Sequence Listing for the above-identified application. The information recorded in Computer Readable Form is identical to the Written Sequence Listing.

Please apply any charges not covered, or any credits, to Deposit Account 501321 in the name of David R. Preston & Associates having Customer No.: 24232.

Respectfully submitted,

Date: Jan 17, 2006



David R. Preston

Reg. No. 38,710

David R. Preston & Associates, A.P.C.
12625 High Bluff Drive
Suite 205
San Diego, CA 92130

Telephone: 858.724-0375
Facsimile: 858.724-0384



NEU-119.P.1, Sequence Listing
SEQUENCE LISTING

<110> Baum, Peter
DuBose, Robert
Sims, John E.
Youakim, Adel
Hasel, Karl W.
Hilbush, Brian S.

<120> Novel DNAs and Polypeptides

<130> 98664-A

<140> PCT/US99/26788

<141> 1999-11-10

<150> 60/107821

<151> 1998-11-10

<160> 33

<170> PatentIn version 3.2

<210> 1

<211> 137

<212> DNA

<213> Homo sapiens

<400> 1
ccggtaagta aacagtcaga aaattagcat gaaaggcgtt tagcattggg aggaaggcaca 60
gatctctaga gctgtcctgt cgctgccag gattgacctg tgtgtaagtc ccaataaaact 120
cacctactca ccaaaaaa 137

<210> 2
<211> 108
<212> DNA
<213> Homo sapiens

<400> 2
cggttcttga gcccagttaga tgccatttga agaaaaaaaaat cacttgaaaa tgagacagaa 60
agaatggaaa ctaaatccta gctctaaagg caccaggctg attaaaaa 108

<210> 3
<211> 306
<212> DNA
<213> Homo sapiens

<400> 3
cggcttcagc agtatcgtgc caaaggcagaa ctagctcgat ctaccagacc ccaggcctgg 60
gttccaaggg aaaaattgcc cagaccactc accagcagtg cttcagctat tcgtaaactt 120
atgcggaaag cagaactcat ggggatcagt acagatatct ttccagtggc caattcagat 180
actagttcta gtgtggatgg aaggagaaaa cataagcaac cagctctcac tgcagattt 240
gtaaattatt atttttagagag aaatatgcgc atgattcaaa ttcaggaaaa tatggctgaa 300

NEU-119.P.1, Sequence Listing

306

caaaaa

<210> 4
<211> 366
<212> DNA
<213> Homo sapiens

<400> 4
cggccatgtg gytgctcggt cctkggttgc tcgcttgctg tgcaagacat tagcccttta 60
gttatgagcc tgtgggaact tcaggggttc ccagtgggga gagcagtggc agtgggaggc 120
atctggggc caaaggtcag tggcaggggg tatttcagta ttataacaact gctgtggcca 180
gacttgtata ctggctgaat atcagtgctg tttgttaattt ttcactttga gaaccaacat 240
taattccata cgaatcaagt gttttgttaac tgcttattcat ttattcagca aatatttatt 300
gatcatctct tctccataag atagtgtgat aaacacagtc atgaataaaag ttatttccac 360
caaaaa 366

<210> 5
<211> 324
<212> DNA
<213> Homo sapiens

<400> 5
cggccgacac tgggctttt atgagagtga cagattacta ggacccatt atgtggtaga 60
agtaatgtag gggaaatggc gattatctt ttttaaaagc aatagctgtt gtatatcaat 120
gataaatgaa aaatttagtta ttcttgtaaa ttgaagaag aatggttatc atagaggta 180
gttcaagtaa aagaaccagg gctgggtgtg gtggctcacg ttctgttagtc cctgtacttt 240
gggaggccaa ggcagatgga tctcttgagg ccaggagttc gagaccagcc tgaccaacat 300
ggcgagaccg tgtctccccca aaaa 324

<210> 6
<211> 398
<212> DNA
<213> Homo sapiens

<400> 6
cggatgtca cagcccacgg gcggcacagt cacttctgcc tggctgtc acaccaaccc 60
aggcagctct gctgtggctt ctccctggct ctggcattag ttggctgtg tcacattgtc 120
agaacaggtg gcctgtgtgg tgccatcgag tccctgctgg ttcccttgc cctggagg 180
tcacccattt cccaaggaag tgcattccacc tggcaggtga cctggaggag tagcttcccc 240
gaggacccccc aggcttggcc tgtgattgcg caaaccacaca ttccctaagc acactggaca 300
cccttcgagt gtgggtttta acatccctgt gagattgaat acttgtgcca cacatgtcac 360
aaaagaggtat gggaaataaaaa gaaaatttat ccgaaaaaa 398

NEU-119.P.1, Sequence Listing

<210> 7
<211> 113
<212> DNA
<213> Homo sapiens

<400> 7
ccggctatg gcattaaccc tcacttaact tttcagcctg ccagcctgcc ctatggattt 60
cggacttgcc agccacacaa ttccttaaaa taaatctctc cgtctcataa aaa 113

<210> 8
<211> 379
<212> DNA
<213> Homo sapiens

<400> 8
ccgggagctg tgaagggaac gtgagggggc ggcgtagtgg agacccacgg caggcctgaa 60
gaagagcggc ggccgagccc gccttccctg caccatgctc atagaggatg tggatgccct 120
caagtccctgg ctggccaagt tactggagcc gatatgtat gctgatcctt cagccttagc 180
caactatgtt gtagcactgg tcaagaagga caaacctgag aaagaattaa aagccttttg 240
tgctgatcaa cttgatgtct ttttacaaaa agaaacttca ggtttgtgg acaaactatt 300
tcaaagtctc tatactaaga actaccccttcc acttttggaa ccagtaaagc ctgagccaaa 360
accactagcc caagaaaaaa 379

<210> 9
<211> 170
<212> DNA
<213> Homo sapiens

<400> 9
cggctgcctg ccttttttc tgatccagac cctcggcacc tgctacttac caactggaaa 60
attttacgca tcccatgaag cccagataca caaaattcca ccccatgatc aagaatcctg 120
ctccactaag aatggtgcta aagtaaaaact agtttaataa gccctaaaaaa 170

<210> 10
<211> 60
<212> DNA
<213> Homo sapiens

<400> 10
ccggatatac gccactgcac tccagcctgg gtgacggagc gagactccgt ctcagaaaaaa 60

<210> 11
<211> 569
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature

NEU-119.P.1, Sequence Listing

<222> (527)..(527)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (542)..(542)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (549)..(549)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (556)..(556)
 <223> n is a, c, g, or t

<400> 11
 tcaatcctgg gcggcgacaa gacagctcta gagatctgag cttcccccataatgctaaact 60
 gctttcatgc taattttctg actgttact taccgggtaa gagcgatggg actgtttca 120
 ttgggtggtt ctcacatact ctctggaaag tttgggttct cagggacacc tgctccctcag 180
 ctggggacca tggccatggc ccaccacccctg cccttcagtg ttcaagcagg ggacatgcac 240
 ccttagtaa cctggggggg acccatcaca tgacaaccac cccaaacgacc atcatcagga 300
 agccgctgcc tgactgagat atgccccag gaggacaagg gagagtggat gctggaaaga 360
 cagggcaggg gaccatcacc agggaaagac ttcattcttc ggaggacatt gaacctgggg 420
 ctgggtctgt agtggagccg ctgtttcttc tcctgtatcc aactgttcta actcttggc 480
 tttctccatt ttcagctctt tctttcctg gccttctcat tgctggntcc ttcaagcctc 540
 cnctctatnc ttccgncaat atattctt 569

<210> 12
 <211> 612
 <212> DNA
 <213> Homo sapiens

<400> 12
 cggcgacaaag acagctctag agatctgagc ttcctccaa tgctaaactg ctttcatgct 60
 aattttctga ctgtttactt accgggtaaag agcgatgggactgtttcat tgggtggttc 120
 tcacataactc tctgggaagt ttgggttctc agggacacct gctcctcagc tggggaccat 180
 ggccatggcc caccacctgc cttcagtgt tcaagcaggg gacatgcacc ctttagtaac 240
 ctggagggga cccatcacat gacaaccacc ccaacgacca tcacaggaa gccgctgcct 300
 gactgagata tgcccccagg aggacaaggg agagtggatg ctggaaagac agggcagggg 360
 accatcacca gggaaagact tcattctcg gaggacattg aacctggggc tgggtctgtat 420
 gtggagccgc tgggtttctt cctgtatcca actgttctaa ctcttgggct ttctccattt 480
 tcagctcttt ctttcctgg ctttcatt gctgggtccct tcaagcctcc tctctattct 540

NEU-119.P.1, Sequence Listing

tccgtcaata tattttttt tttttttt ttttggaaatg gagtctcgct ctgtcaccca 600
agctggagtg ca 612

<210> 13
<211> 618
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (613)..(613)
<223> n is a, c, g, or t

<400> 13
cacgagctgt ctggttatta tacagacgca taactggagg tgggatccac acagctcaga 60
acagctggat cttgctcagt ctctgccagg ggaagattcc ttggaggagg ccctgcagcg 120
acatggaggg agctgctttg ctgagagtct ctgtcctctg catctggatg agtgcacttt 180
tccttggtgt gggagtgagg gcagaggaag ctggagcggag ggtgcaacaa aacgttccaa 240
gtggacaga tactggagat cctcaaagta agcccccctcg tgactggct gctggcacca 300
tggacccaga gagcagtatc tttattgagg atgccattaa gtatttcaag gaaaaagtga 360
gcacacagaa tctgctactc ctgctgactg ataatgaggc ctgaaacggg ttcgtggctg 420
ctgctgaact gcccaggaat gaggcagatg agctccgtaa agctctggac aaccttgcac 480
gacaaatgtat catgaaagac aaaaactggc acgataaagg ccagcagtac agaaactgg 540
ttctgaaaag agtttcctcg ggtgaaaaag taagctttag gataacataa gaaagcttcc 600
gtgcccccttgc aanatggg 618

<210> 14
<211> 1044
<212> DNA
<213> Homo sapiens

<400> 14
gaatttaata cgactcacta taggaaattt gcccctcgag gccaagaatt cgccacgagg 60
caacaacaac aacaaaaaaaaa aactgaacat ctccatatta ctgacaccca attcaagaaa 120
caaaatatta cagcccccttc caggatattc ctggggtctc ttccatctct actaaccct 180
gactacaaac agcctccacc tatttcaccc gacattgtac tttatgaaag cagcagttct 240
cagatggggc tattttgccc cctggggaca ttagggagta tctggagaca ctgagggttg 300
tgtctacttg gggggagttt tgttactgca tccagtgagt ccagggatcc agggatgccg 360
ctcaacatcc taaaaatgcac agggaaacccc cacacataga acagagaaat tgctgagcca 420
aatgtcagc agtgtcacag ctgacaccct gatatacaca ctatcacaca gtatctgctc 480

NEU-119.P.1, Sequence Listing

tttcgggctc	aggatcttt	tcattctaat	catctcatag	gaaacagaaaa	tgtcatttag	540
aggtaggtac	agtccacaac	aaagaagaac	ctgagtttt	ttttttttt	taatcagcct	600
gggccttta	gagctaggat	ttagttcta	ttctttctgt	ctcatttca	agtgatttt	660
ttcttcaaataat	ggcatctact	gggctcaaga	actggagatc	cccacaaagc	tgagattcac	720
atgggaattt	tgtacacacc	cacacaggta	tacacttcca	tttacatgca	gacatccacc	780
cacagataca	cacatccgga	gaccaagaca	gaacgcaaac	tgccccataa	aagcacggtt	840
ccccaaacag	gagaaacgca	ccattcactc	cagggaggtt	tctatttgc	taattcagcc	900
tctgatagtc	aggctgttgc	caagcccagc	tctgaaactc	ttccctctta	ggaaagaaaag	960
atggatttt	tcttactca	agaatataga	tctaaaaaaaaa	aaaaaaaaaa	aagttggcgg	1020
ccgcaagctt	attcccttta	gtga				1044

<210> 15
 <211> 2577
 <212> DNA
 <213> Homo sapiens

<400> 15	ggtaccgggc	ccccctcga	ggtcgacggt	atcgataagc	ttgatatcga	attcgcggcc	60
	gctgagaaat	taactccccg	gggcccgg	gttgactgcg	ctgcctggc	cggaggctt	120
	ctccggccag	ggagcgctgt	gggaaggggc	tcgagcggcc	agggccaggc	gaggccgggg	180
	gggcgggggg	ttaggggacc	gcggggctac	tcttggagc	gccccgttcc	ggctggctgc	240
	gcgcgggtt	taaatagcat	cttcggact	tgtcttcgcg	gccccagtcc	ccgacctcgg	300
	cgctgcctgg	gctcctgcag	cctctcccta	agtcttctcc	aaacgaccac	ctcacggatt	360
	ccttatggat	cgcagctcca	agaggaggca	ggtgaagcct	ttggcagctt	ctctgctgga	420
	agctcttgat	tatgatagtt	cagatgacag	tgattttaaa	gttggagatg	cctcaggact	480
	cgctgattct	tgagaagagt	caaaactgga	gctctaaaaa	aatggaccat	attctgattt	540
	gctgttttg	tctggagat	aatagtgagg	acgctgtatga	aataattcag	tgtacaattt	600
	gttgcattac	agtccatgaa	ggttgttatg	gagttgatgg	agagagtgac	tctattatga	660
	gttcagcttc	tgaaaactcc	actgaacctt	ggttttgta	tgcctgtaaa	tgtggtgttt	720
	ctcctagctg	tgaactgtgt	cctaattcagg	atgaaattt	caaggagaca	gatgctggaa	780
	gatgggttca	tattgtttgt	gccctgtatg	ttcctggagt	agcctttgga	gatattgaca	840
	aattacgacc	agtaacacta	acggaaatga	actattccaa	atatggtgcc	aaggagtgt	900
	gcttttgta	agaccctcgc	tttgctagaa	ctggggtttg	cattagctgt	gatgcaggga	960
	tgtgcagagc	ctatttccat	gtgacctgtg	ctaaaagga	aggctgtt	tcagaggcag	1020
	cgccggaaga	ggatatacgca	gatccattct	ttgcttattt	taagcaacat	gcagataggt	1080

NEU-119.P.1, Sequence Listing

tagacagaaa	gtggaagaga	aaaaactact	tggctctaca	gtcctattgt	aaaatgtctt	1140
tgcaagagag	agagaagcaa	ctatcaccag	aagcacaggc	aaggatcaat	gccggcttc	1200
agcagtatcg	tgccaaagca	gaactagctc	gatctaccag	accccaggcc	tgggttccaa	1260
gggaaaaatt	gcccagacca	ctcaccagca	gtgcttcagc	tattcgtaaa	cttatgcgga	1320
aagcagaact	catggggatc	agtacagata	tcttccagt	ggacaattca	gatactagtt	1380
ctagtgtgga	tggaaggaga	aaacataagc	aaccagctct	cactgcagat	tttgtgaatt	1440
attattttga	gagaaatatg	cgcattgattc	aaattcagga	aaatatggct	gaacaaaaga	1500
atataaaaaga	taaatttagag	aatgaacaag	aaaagcttca	tgtagaatat	aataagctat	1560
gtgaatctt	agaagaacta	caaaacctga	atggaaaact	tcgaagtgaa	ggacaaggaa	1620
tatgggcttt	actaggcaga	atcacagggc	agaagttgaa	tataccggca	attttgcgag	1680
cacccaagga	gagaaaacca	agtaaaaaag	aaggaggcac	acaaaagaca	tctactcttc	1740
ctgcagttact	ttatagttgt	gggatttgcata	agaagaacca	tgatcagcat	cttcttttat	1800
tgtgtatac	ctgtaaacta	cattaccatc	ttggatgtct	ggatcctcct	cttacaagga	1860
tgccaagaaa	gacaaaaaac	agttattggc	agtgcgcga	atgtgaccag	gcagggagca	1920
tgacatgga	agcagatatg	gccatggaaa	ccctaccaga	tggaaccaaa	cgatcaagga	1980
ggcagattaa	ggaaccagtg	aaatttgc	cacaggatgt	gccaccagaa	cccaagaaga	2040
ttccgataag	aaacacgaga	accagaggac	gaaaacgaag	cttcgttcct	gaggaagaaa	2100
aacatgagga	aagagttcct	agagagagaa	gacaaagaca	gtctgttttgc	caaaagaagc	2160
ccaaggctga	agatttaaga	actgaatgt	caacttgc	ggaaactgga	gacaatgaaa	2220
atcttgcag	gtgtgatgaa	tgcagactct	gctaccattt	tggctgttttgc	gatcctcctt	2280
tgaaaaagtc	tcctaaacag	acaggctacg	gatggatatg	tcaaatgt	gattttcat	2340
cttccaagga	agatgaaaat	gaagctgaaa	gaaaaaataat	atctcaggag	ctcaacatgg	2400
aacagaaaaa	tccaaagaaa	taaaagattt	tctgtgtgt	ttttgaaaag	tttgcagctt	2460
atgtaatagc	agataaaaatt	tctaattgta	aaatgttaaa	ttgagcggcc	gcgaattcct	2520
gcagccccgg	ggatccacta	gttctagagc	ggccgccacc	gcgggtggagc	tccagct	2577

<210> 16
 <211> 2065
 <212> DNA
 <213> Homo sapiens

attaacccctc	actaaaggga	acaaaagctg	gagctccacc	gcgggtggcg	ccgctctaga	60
actagtggat	ccccccggc	gcaggaattc	ggcacgaggt	gcgcggctgc	aacggcagcc	120
gcgggaagct	cggccggca	gggtttcccc	gcacgctggc	gccagctcc	cgccgcggag	180

NEU-119.P.1, Sequence Listing

gccgctgtaa	gtttcgcttt	ccattcagtg	aaaaacgaaa	gctgggcggg	gtgccacgag	240
cgcggggcca	gaccaaggcg	ggcccgagc	ggaacttcgg	tcccagctcg	gtccccggct	300
cagtcccgac	gtggactca	gcagcggagg	ctggacgctt	gcatggcgct	tgagagattc	360
catcggtcct	ggctcacata	agcgcttcct	ggaagtgaag	tcgtgctgtc	ctgaacgcgg	420
gccagggcagc	tgcggcctgg	gggttttgg	gtgatcacga	atgagcaagg	cgtttgggct	480
cctgaggcaa	atctgtcagt	ccatcctggc	tgagtccctcg	cagtccccgg	cagatcttga	540
agaaaaagaag	gaagaagaca	gcaacatgaa	gagagagcag	cccagagagc	gtcccagggc	600
ctgggactac	cctcatggcc	tggttggttt	acacaacatt	ggacagacct	gctgccttaa	660
ctccttgatt	caggtgttcg	taatgaatgt	ggacttcacc	aggatattga	agaggatcac	720
ggtgcccagg	ggagctgacg	agcagaggag	aagcgtccct	ttccagatgc	ttctgctgct	780
ggagaagatg	caggacagcc	ggcagaaagc	agtgcggccc	ctggagctgg	cctactgcct	840
gcagaagtgc	aacgtgcctt	tgtttgtcca	acatgatgct	gcccaactgt	acctcaaact	900
ctggAACCTG	attaaggacc	agatcaactga	tgtgcacttg	gtggagagac	tgcaggccct	960
gtatatgatc	cgggtgaagg	actccttgat	ttgcgttgac	tgtgccatgg	agagtagcag	1020
aaacagcagc	atgctcaccc	tcccactttc	tcttttgat	gtggactcaa	agcccctgaa	1080
gacactggag	gacgcctgc	actgcttctt	ccagcccagg	gagttatcaa	gcaaaagcaa	1140
gtgcttctgt	gagaactgtg	ggaagaagac	ccgtggaaa	caggtcttga	agctgaccca	1200
tttgcggccag	accctgacaa	tccacctcat	gcgattctcc	atcaggaatt	cacagacgag	1260
aaagatctgc	cactccctgt	acttccccca	gagcttgat	ttcagccaga	tccttccaat	1320
gaagcgagag	tcttgtatg	ctgaggagca	gtctggaggg	cagtatgagc	ttttgctgt	1380
gattgcgcac	gtggaaatgg	cagactccgg	tcattactgt	gtctacatcc	ggaatgctgt	1440
ggatggaaaa	tggttctgct	tcaatgactc	caatatttc	ttgggtgcct	gggaagacat	1500
ccagtgtacc	tacggaaatc	ctaactacca	ctggcagggaa	actgcatatc	ttctggttta	1560
catgaagatg	gagtgcta	ggaaatgccc	aaaacttca	gagattgaca	cgctgtcatt	1620
ttccatttcc	gttcctggat	ctacggagtc	ttctaaagaga	ttttgcaatg	aggagaagca	1680
ttgtttcaa	actatataac	tgagccttat	ttataattag	ggatattatc	aaaatatgt	1740
accatgaggc	ccctcaggc	ctgatcagtc	agaatggatg	ctttcaccag	cagacccggc	1800
catgtggctg	ctcggtcctg	ggtgctcgct	gctgtgcaag	acattagccc	tttagttatg	1860
agcctgtgg	aacttcaggg	gttcccagt	gggagagcag	tggcagtgg	aggcatctgg	1920
gggccaaagg	tcagtggcag	ggggtatttc	agtattatac	aactgctgt	accagacttg	1980
tatactggct	gaatatcagt	gctgtttgt	attttcact	ttgagaacca	acattaattc	2040
catatgaaaa	aaaaaaaaaa	aaaaaa				2065

NEU-119.P.1, Sequence Listing

<210> 17
<211> 1588
<212> DNA
<213> Homo sapiens

<400> 17
gcggccgctc tagaactagt ggatccccc ggctgcagga attcgcgcc gctaaatgaa 60
ctccccataag agtctacaca ccatagaact cataccagga atcacaaagt ctctaaattt 120
ccaaagttaa ctggaaatatacataactgc agaataattc caggccaaaa tatgttaaat 180
tcataacatg atgtatatac aaggaaaaaa ggacatgtgg aaatgacaca ttatcttcag 240
tgtataaaat attcatttat gtgaagtttc ttggaaaggc tacactacta ttactggttt 300
ccgtctgatg tttgagatct gttgattta tgctttctt acaggcctt cattatgatc 360
tttggaaagg aatcaataaaa atgatagggc ctacttcatt aggtgtggtt cattcctatt 420
catgctccct ggaagaacaa gaatgctgaa ttttgaatt taatattgta tgaatttagca 480
tcagggagag gtggagaaaa atacaaaact aaaagtcatg cttattgtgt tcagtgtgcc 540
cttctccaga gggccactgg cttataggaa aggattgctg ctctaccagt tgaccaggag 600
atggcacgcc aggacattaa gacactggag tttgtttcg tttttttt ttttttttag 660
atggagtctc gctcttta caggcaggag tacagtggtg cgatctcgcc tcactgcaaa 720
ctccgcctcc cgggttcaag tgattctcct gcctcggcct cccgagtagc tgggactaca 780
ggcgtgtgcc accacccca gctaactttt gtatttttag tagagacagg gtttcaccat 840
gttggccagg atggctcaa tctcttgacc tcatgatccg cccgcctccg cttccaaag 900
tgctggatt acaggcgtga gccagtgtgc cggccgaca ctggctttt tatgagagtg 960
acagattact aggacccat tatgtggtag aagtaatgta gggaaatgg cgattatctt 1020
tttttaaaag caatagctgt tgtatataa tgataatgaa aaaatttagtt attcttgaa 1080
attgaagaaa gaatggttt catagagggt agttcaagta aaagaaccag ggctgggtgt 1140
ggtggctcac gttctgtat ccctgtactt tgggaggcca aggagatgg atctcttgag 1200
gccaggagtt cgagaccagc ctgaccaaca tggcaaaacc gtgtctctac aaaaataca 1260
aaaatttagcc ggacatcgtg gtagatgcct gtagtctcag atattcagga gaccgagggg 1320
aaaatcactt gaacccgggg gacggagggtt gcagttagt gagatcgac cactgctcgc 1380
cagcctggc aacagagtga gactctgcct caaaaaaaaaa ccaaaccaaa ccaaagaacc 1440
agaatagcat gtgcacatatac acacagacgt ttcacaactg gcattatgtt ttgctactgt 1500
tttatttaca atgtatcaca agtttatgc ttataaaaa ttataatcata acttcaaaaa 1560
aaaaaaaaaaa aaaaagcggc cgcaatt 1588

NEU-119.P.1, Sequence Listing

<210> 18
 <211> 2173
 <212> DNA
 <213> Homo sapiens

<400> 18
 gcggccgctc ttttacccag tggtaaaaac tggcacaaca caggatttat actggagagc 60
 aacctcacaa atgtaatgaa agtggtaagg ctttttatca aatgtccttg tctttggggt 120
 catgagaaaa ttcatacaga atctattaaa aatgtactaa acatggaaag acctttaagc 180
 aacagtgatg ttagtggatg ggtatgttt taaatgaact cccataagag tctacacacc 240
 atagaactca taccaggaat cacaaggctc ctaaattcc 300
 caaaactgcag aataattcca ggcggaaaata tggtaaattc ataacatgat gtatataaaa 360
 gggaaaaagg acatgtggaa atgacacatt atcttcagtg tataaaatat tcatttatgt 420
 gaagtttctt gggaaaggcta cactactatt actggttcc gtctgatgtt tgagatctgt 480
 tgatttatg ctttcttac aggccttca ttatgatctt tggtaaggaa tcaataaaaat 540
 gatagggcct acttcatttag gtgtggttca ttccttattca tgctcgccgc cgctctagaa 600
 ctagtggatc ccccgccctg caggaattcg cggccgctaa atgaactccc ataagagtct 660
 acacaccata gaactcatac caggaatcac aaagtctcta aattccaaa gtttaactgga 720
 aatattacaa actgcagaat aattccaggc caaaatatgt taaattcata acatgatgt 780
 tatcaaagga aaaaaggaca tggtaaattg acacattatc ttcaatgtat aaaatattca 840
 ttatgtgaa gtttcttgg aaggctacac tactattact ggttccgtc tgatgttga 900
 gatctgtga ttttatgctt ttcttacagg ctttcttattca tgatcttgg gaaggaatca 960
 ataaaatgtat agggcctact tcatttagtg tggttcattc ctattcatgc tccctggaaag 1020
 aacaagaatg ctgaattttg aaatttaata ttgtatgaat tagcatcagg gagaggtgga 1080
 gaaaaataca aaactaaaaag tcatgcttacat tggttcattgt gtgccttct ccagagggcc 1140
 actggcttacat agggaaaggat tgctgctcta ccagttgacc aggagatggc acgccaggac 1200
 attaagacac tggagttttg ttctgtttt tttttttttt ttgagatggta gtctcgctct 1260
 cttgacaggc aggagtacag tggtaatgtc tcggctcact gcaactccg cctccgggt 1320
 tcaagtgttattttt tttttttttt ttgagatggta gtctcgctct 1380
 cccctttttttt tttttttttt ttgagatggta gtctcgctct 1440
 ctcaatctct tggatgttattttt tttttttttt ttgagatggta gtctcgctct 1500
 cgtgagccag tggtaatgtc tcggctcact gcaactccg cctccgggt 1560
 ctttcttctt tttttttttt ttgagatggta gtctcgctct 1620
 gctgtgttat atcaatgata aatggaaaaat tagttattct tggtaatgtc agaaagaatg 1680
 gtttatcatag agggtagttc aagtaaaaaga accaggctg ggtgtgggttccacgttct 1740

NEU-119.P.1, Sequence Listing

gtaatccctg tactttggga ggccaaggca gatggatctc ttgaggccag gagttcgaga	1800
ccagcctgac caacatggca aaaccgtgtc tctacaaaaa atacaaaaat tagccggaca	1860
tcgtggtaga tgccctgttagt ctcagatatt caggagaccg agggaaaaat cacttgaacc	1920
cggggacgg aggttcagt gagctgagat cgccaccactg ctcgccagcc tgggcaacag	1980
agtgagactc tgccctaaaa aaaaacccaaa ccaaaccaaa gaaccagaat agcatgtgca	2040
catatacaca gacgtttcac aactggcatt atgtttgct actgtttat ttacaatgtatcacaagttt tatgctttaa taaaatttaa tcataacttc aaaaaaaaaa aaaaaaaaaa	2100
gcggccgcga att	2160
	2173

<210> 19
 <211> 2410
 <212> DNA
 <213> Homo sapiens

<400> 19	
gaattcggca cgagggaaac atttgccttgc tgcagaagat cacccttagt tcttcctcgg	60
aagagtatca gaaggtctgg aaccttttta accgcacgct gccttctac tttgttcaga	120
agattgagcg agtacagaac ctggccctct ggaaagtctta ccagtgggtgc gttggggctc	180
gctcttggtg ggctgggtac tctgtccctt cacaccactg gctggttgc acatgtggcc	240
cgggttcca gaaaaagcag agcggcagtt agggctgcca tgtgctggaa gctgtgtgtc	300
tgctcttccctt cgtccgctcc cccagggcag tgtggtagca catcccattt tagagatgag	360
ggcaccgagg cttcctggag cataccacct ggtcccggttc atgagtggtg gcaaagctag	420
cactctcaact tgtccattttt gccttcctgg agaccagtgg gatgggtcag tacagccac	480
cacaccatta gccccaggaa cataaggctg tggctagaca gcaggggtct caggttccata	540
catgaggact ggcttgcctt tgagcaccca ctcacctgtc tatgtggggaa ggaatccatc	600
aataggtcac catggcaggc tgggtcttgc tgacctgtcc ccagatgggg ttggggtagt	660
gtaatgtgtatc ctctgtgcac agtgatgaag tctggaaatg ggagagggaa gaaggatggg	720
cacccactga ccagcagcct gaaaattcctt acagcatccc agggctcagc tccatgcagg	780
agcaaggtgg gggtggggttt gggggaaatg ttaccatatt tccaagggtct gctctgcctt	840
tggagtcag ggaaccgctg ctgtctggag ctgtggaggg agggtttca cccagctccc	900
acgatcccccc ttctttcca caccctggct tggctggaa gccttacagg cctagtcagg	960
gtagcctgtg acctgcgtct ctggcccca ggacactttt ggaattttgg aaaaatgtgt	1020
tgttttgcattt caggccggct gtatttggtg gcccggcacac tctgccccca gcacacattc	1080
ttctgtgattt ctaggcaaaa aggacagatg cagaaggcaga acggagggaa ggccgtggac	1140
gagcggcagc tggccacgg caccagcgcc atttttggtgg acggccatctg ccagcagaac	1200

NEU-119.P.1, Sequence Listing

tttgactggc gggctgtgg tgttcatggc acttcctacg gcaaggggag ctactttgcc	1260
cgagatgctg catattccca ccactacagc aaatccgaca cgcagaccca cacgatgttc	1320
ctggcccggg tgctggtggg cgagttcgac aggggcaatg cctccttgc ccgtccgccc	1380
gccaaggagg gctggagcaa cgccttctat gatagctgcg tgaacagtgt gtccgacccc	1440
tccatcttgc tgatcttgc gaaacaccag gtctaccag agtatgtcat ccagtacacc	1500
acccctcca agccctcggt cacaccctcc atccctgctgg ccttgggctc cctgttcagc	1560
agccgacagt gagcgcacag gagtgttcca ggccttcac ctgctctgcc ttgaaatggc	1620
tatttgggcc tttccttttc ttttaaaaca gaaacttttta atgaactgtt ctcttaacat	1680
tgacctctca atgaagttat gttcttaatc tcttgctaat aatgattttt acttttaagt	1740
cactttggg ttcacttagtg gattaaccag aagtgattgt agttgagtcc agtttgctt	1800
ttaataatg tggtaagtt ttagttttta ctctttgtt actttgctgc ttattggcac	1860
cagggacaga gtttctagat acaattttat ggattggttt taattttat gagtttgct	1920
ctgcagtgt tcgggttctc agagtcctat ggcatacatag ttttccaga atgacacagt	1980
agccaccggc ggatgacagc ccacgggctgg cacagtcact tctgcctgtt gctctgacac	2040
caaccaggc agctctgttgc tggcttctcc tggctctgg cattagttgg tctgtgtcac	2100
attgtcagaa caggtggctg ctgtgtggtg ccatcgagtc cctgctggtt ccccttgccc	2160
tggagggc acccattgcc caaggaagtg catccacctg gcaggtgacc tggaggagta	2220
gcttccccga ggaccccccag gcttggcctg tgattgcgc aaccacatt tcctaagcac	2280
actggacacc ctgcagtgtt gggtttaac atccctgtga gattgaatac ttgtgccaca	2340
catgtcacaa aagagtatgg aaataaaaga aaatttatcc gaaaaaaaaaaaaaaaat	2400
gagcggccgc	2410

<210> 20
 <211> 1669
 <212> DNA
 <213> Homo sapiens

<400> 20	
ttgcagagct cgttagtga accgtcagaa ttttgaata cgactcacta tagggcgccc	60
gcgaattcgg caccagggtt ccccccggctc tggcagagaa acctgggttt cgacttgcga	120
agcttgggtt tggatgtggg aattggcttg gagtcatagg cgatgagagg gacatttagga	180
tattatgaag cccgtgaact caactcctga gaaggacaca gcagagcgag agaaaagatg	240
gaataaaaag gcctacctca ttgggctcgt gtgggtgagg agaactgaag agtctgagag	300
cgccggcacga gccagaggct acggaaaaca ctgcctcct acactccacc ttggagagac	360
ccagaaaaga acaagcttca tttgtaaaaa aggaaaacaa ctcaggcaat gggggtggt	420

NEU-119.P.1, Sequence Listing

taaaggcact	ctacagtgtg	cagatgcctt	ccacttcttc	catctgccct	gtctctccaa	480
gaaccctat	ggccccggtc	tcagaacaga	gctgagtgc	gaaatgaaaa	tctatggctc	540
tgtgttccaa	aacgatgaag	aattcaaga	tggtggcagt	ggtaaaatcc	ttctccagga	600
aaaatctgtc	cttggcccaa	tgtgtaaaca	cttgctgagg	aacttggaaat	aacttgcagt	660
gtcttgcagt	attgtgaaac	cagcaacttg	ttcacaattc	ttctgaattt	cttgggaaat	720
ttgaagtgga	gtacctgtac	caacatgaaa	tgacacgaat	ttaagtgc	ctcaacaacg	780
aaaagcaaaa	agaaccaaag	aggaagcaac	tgaaacaaca	tctggatgt	tttaaaaata	840
tacaatgcct	ccaaaatcag	gtgtcattaa	tgaaaattct	gaagaaatgc	caccggacat	900
agccaaacgca	cctacgctgt	tgttattcat	ttcctgctt	tcacagaaaa	caattttgtt	960
gcatggaaga	tcgtgaactt	caaagggcag	aggggaaact	gtcccttggc	ctctaccct	1020
ccaaggcccc	acttttcat	caacactcct	tggacgcagc	agaagtatga	acataatatg	1080
gtcctgaatg	aggctgagtc	tttggcgca	gaagacccgg	gttaataaaa	ataggaaggt	1140
aagaaaaagaa	aagaaaaatc	aagacacatc	ataggactaa	attcctatta	tttatccact	1200
caggattgac	cacccctttg	ggccagatag	ttgtacccccc	atgtaccagg	tgggcacatg	1260
aagacacaag	aagtgcgtg	atggttcatt	ttgcacgtca	ccttgcgtgg	agtatgccaa	1320
ctcattgttt	ggtcaaacac	tagtctggac	atggtgtaa	aggtatttt	tagatgagat	1380
taacgcctaa	atcagtaaag	caggttaccc	accatactac	gggtgggccc	tgtccaatca	1440
gttgaaggca	ttaagaacaa	agattgaggt	ttcctaaaga	agatgaaatt	ctccttgaga	1500
ctacaacata	gaaaccctat	ctgagttcc	agcctgtgc	cctgtggaaat	tcaaactcag	1560
gactccggtc	tatggcatta	accctcactt	aactttcag	cctgccagcc	tgccctatgg	1620
atttcggact	tgccagccac	acaattcctt	aaaataaaatc	tctccgtct		1669

<210> 21
<211> 1025
<212> DNA
<213> Homo sapiens

<400> 21	atggatagtc	gccacacctt	tgcccctgct	gcatgaccc	tgtgcact	tctgctgttc	60
	ctgccaccgc	tgctgctgct	gctggacgtc	cccacggcgg	cggtgcaggc	gtcccctctg	120
	caagcgtag	acttctttgg	aatgggcca	ccagttact	acaagacagg	caatctatac	180
	ctgcgggggc	ccctgaagaa	gtccaatgca	ccgcttgc	atgtgaccct	ctactatgaa	240
	gcactgtgcg	gtggctgccc	agccttcctg	atccgggagc	tcttcccaac	atggctgttg	300
	gtcatggaga	tcctcaatgt	cacgctggtg	ccctacggaa	acgcacagga	acaaaatgtc	360
	agtggcaggt	gggagttcaa	gtgccagcat	ggagaagagg	agtcaaatt	caacaagg	420

NEU-119.P.1, Sequence Listing

gaggcctgcg tggatga acttgacatg gagctgcct tcctgaccat tgtctgcatt	480
gaagagttt aggacatgga gagaagtctg ccactatgcc tgcaagtcata cgccccaggg	540
ctgtcgccag acactatcat ggagtgtca atgggggacc ccggcatgca gctcatgcac	600
gccaacgccc agcggacaga tgctctccag ccaccacacg agtatgtgcc ctgggtcacc	660
gtcaatggga aacccttggaa agatcagacc cagctcctta cccttgcctg ccagttgtac	720
cagggcaaga agccggatgt ctgcccctcc tcaaccagct ccctcaggag tgtttgcttc	780
aagtgtatggc cggtagctg cggagagctc atggaaaggcg agtggaaacc cggctgcctg	840
cctttttttt ctgatccaga ccctcggcac ctgctactta ccaactggaa aattttatgc	900
atcccattgaa gcccagatac aaaaattcc accccatgtat caagaatcct gctccactaa	960
aatggtgct aaagtaaaac tagtttata agcaaaaaaa aaaaaaaaaa aattcctgctg	1020
gccgc	1025

<210> 22
 <211> 1039
 <212> DNA
 <213> Homo sapiens

<400> 22	60
gaattcggca cgagggctgc agtcgccaca ctttgcctt tgctgcgtatg accctgtcgc	60
cacttctgct gttcctgcca ccgctgctgc tgctgcttgg cgtccccacg gcggcggtgc	120
aggcgcccccc tctgcaagcg ttagacttct ttggaaatgg gccaccagtt aactacaaga	180
caggcaatct atacctgccc gggccctga agaagtccaa tgcaccgcctt gtcaatgtga	240
ccctctacta tgaagcactg tgccgtggct gccgagcctt cctgatccgg gagctttcc	300
caacatggct gttggcatg gagatcctca atgtcacgtt ggtgcctac ggaaacgcac	360
aggaacaaaa tgtcagtggc aggtggaggt tcaagtgcctt gcatggagaa gaggagtgc	420
aattcaacaa ggtggaggcc tgcgtgttgg atgaacttga catggagcta gccttcctga	480
ccattgtctg catggaaagag ttggaggaca tggagagaag tctgccacta tgccctgcagc	540
tctacgcccccc agggctgtcg ccagacacta tcatggagtg tgcaatgggg gaccccgca	600
tgcagctcat gcacgccaac gcccagcggc cagatgcctt ccagccacca cacgagtatg	660
tgcctgggt caccgtcaat gggaaaccct tggaaagatca gaccagctc cttacccttg	720
tctgccagtt gtaccagggc aagaagccgg atgtctgcctt ttcctcaacc agctccctca	780
ggagtgtttt cttcaagtga tggccggta gctgcggaga gctcatggaa ggcgagtggg	840
aacccggctg cctgcctttt ttttctgatc cagaccctcg gcacccgtcta cttaccaact	900
ggaaaatttt atgcatcccc tgaagccag atacacaaaa ttccacccca tgatcaagaa	960
tcctgctcca ctaagaatgg tgctaaagta aaactagtt aataagcaaa aaaaaaaaaa	1020

NEU-119.P.1, Sequence Listing

aaaaaaattcc tgccggccgc

1039

<210> 23
<211> 466
<212> DNA
<213> Homo sapiens

<400> 23
atggatagtc gccacacctt tgccctgct gcgatgaccc tgtcgccact tctgctgttc 60
ctgccaccgc tgctgctgct gctggacgac cccacggcgg cggtgcaggc gtcccctctg 120
caagcgtagt acttctttgg gaatggcca ccagttact acaagacagg caatctatac 180
ctgcgggggc ccctgaagaa gtccaatgca ccgcttgcata atgtgaccct ctactatgaa 240
gcactgtgcg gtggctgccc agcttcctg atccgggagc tcttcccaac atggctgttg 300
gtcatggaga tcctcaatgt cacgctggtg ccctacggaa acgcacagga acaaaatgtc 360
agtggcaggt gggagttcaa gtgccagcat ggagaagagg agtgcattt caacaagggtg 420
gaggcctgctg tttggatga acttgacatg gagctagcct tcctga 466

<210> 24
<211> 32
<212> PRT
<213> Homo sapiens

<400> 24

Met His Trp Glu Glu Ala Gln Ile Ser Arg Ala Val Leu Ser Leu Pro
1 5 10 15

Arg Ile Asp Leu Cys Val Ser Pro Asn Lys Leu Thr Tyr Ser Pro Lys
20 25 30

<210> 25
<211> 98
<212> PRT
<213> Homo sapiens

<400> 25

Met Glu Phe Asn Thr Thr His Tyr Arg Glu Phe Gly Pro Arg Gly Gln
1 5 10 15

Glu Phe Gly Thr Arg Gln Gln Gln Gln Lys Lys Thr Glu His Leu
20 25 30

His Ile Thr Asp Thr Gln Phe Lys Lys Gln Asn Ile Thr Ala Pro Ser
35 40 45

Arg Ile Phe Leu Gly Ser Leu Pro Ser Leu Leu Thr Pro Asp Tyr Lys
50 55 60

NEU-119.P.1, Sequence Listing

Gln Pro Pro Pro Ile Ser Pro Asp Ile Val Leu Tyr Glu Ser Ser Ser
65 70 75 80

Ser Gln Met Gly Leu Phe Cys Pro Leu Gly Thr Leu Gly Ser Ile Trp
85 90 95

Arg His

<210> 26
<211> 663
<212> PRT
<213> Homo sapiens

<400> 26

Met Ile Val Gln Met Thr Val Ile Leu Lys Leu Glu Met Pro Gln Asp
1 5 10 15

Ser Leu Ile Leu Glu Lys Ser Gln Asn Trp Ser Ser Gln Lys Met Asp
20 25 30

His Ile Leu Ile Cys Cys Val Cys Leu Gly Asp Asn Ser Glu Asp Ala
35 40 45

Asp Glu Ile Ile Gln Cys Asp Asn Cys Gly Ile Thr Val His Glu Gly
50 55 60

Cys Tyr Gly Val Asp Gly Glu Ser Asp Ser Ile Met Ser Ser Ala Ser
65 70 75 80

Glu Asn Ser Thr Glu Pro Trp Phe Cys Asp Ala Cys Lys Cys Gly Val
85 90 95

Ser Pro Ser Cys Glu Leu Cys Pro Asn Gln Asp Gly Ile Phe Lys Glu
100 105 110

Thr Asp Ala Gly Arg Trp Val His Ile Val Cys Ala Leu Tyr Val Pro
115 120 125

Gly Val Ala Phe Gly Asp Ile Asp Lys Leu Arg Pro Val Thr Leu Thr
130 135 140

Glu Met Asn Tyr Ser Lys Tyr Gly Ala Lys Glu Cys Ser Phe Cys Glu
145 150 155 160

Asp Pro Arg Phe Ala Arg Thr Gly Val Cys Ile Ser Cys Asp Ala Gly
165 170 175

NEU-119.P.1, Sequence Listing

Met Cys Arg Ala Tyr Phe His Val Thr Cys Ala Gln Lys Glu Gly Leu
180 185 190

Leu Ser Glu Ala Ala Ala Glu Glu Asp Ile Ala Asp Pro Phe Phe Ala
195 200 205

Tyr Cys Lys Gln His Ala Asp Arg Leu Asp Arg Lys Trp Lys Arg Lys
210 215 220

Asn Tyr Leu Ala Leu Gln Ser Tyr Cys Lys Met Ser Leu Gln Glu Arg
225 230 235 240

Glu Lys Gln Leu Ser Pro Glu Ala Gln Ala Arg Ile Asn Ala Arg Leu
245 250 255

Gln Gln Tyr Arg Ala Lys Ala Glu Leu Ala Arg Ser Thr Arg Pro Gln
260 265 270

Ala Trp Val Pro Arg Glu Lys Leu Pro Arg Pro Leu Thr Ser Ser Ala
275 280 285

Ser Ala Ile Arg Lys Leu Met Arg Lys Ala Glu Leu Met Gly Ile Ser
290 295 300

Thr Asp Ile Phe Pro Val Asp Asn Ser Asp Thr Ser Ser Ser Val Asp
305 310 315 320

Gly Arg Arg Lys His Lys Gln Pro Ala Leu Thr Ala Asp Phe Val Asn
325 330 335

Tyr Tyr Phe Glu Arg Asn Met Arg Met Ile Gln Ile Gln Glu Asn Met
340 345 350

Ala Glu Gln Lys Asn Ile Lys Asp Lys Leu Glu Asn Gln Glu Lys
355 360 365

Leu His Val Glu Tyr Asn Lys Leu Cys Glu Ser Leu Glu Glu Leu Gln
370 375 380

Asn Leu Asn Gly Lys Leu Arg Ser Glu Gly Gln Gly Ile Trp Ala Leu
385 390 395 400

Leu Gly Arg Ile Thr Gly Gln Lys Leu Asn Ile Pro Ala Ile Leu Arg
405 410 415

Ala Pro Lys Glu Arg Lys Pro Ser Lys Lys Glu Gly Gly Thr Gln Lys
Page 17

NEU-119.P.1, Sequence Listing
420 425 430

Thr Ser Thr Leu Pro Ala Val Leu Tyr Ser Cys Gly Ile Cys Lys Lys
435 440 445

Asn His Asp Gln His Leu Leu Leu Cys Asp Thr Cys Lys Leu His
450 455 460

Tyr His Leu Gly Cys Leu Asp Pro Pro Leu Thr Arg Met Pro Arg Lys
465 470 475 480

Thr Lys Asn Ser Tyr Trp Gln Cys Ser Glu Cys Asp Gln Ala Gly Ser
485 490 495

Ser Asp Met Glu Ala Asp Met Ala Met Glu Thr Leu Pro Asp Gly Thr
500 505 510

Lys Arg Ser Arg Arg Gln Ile Lys Glu Pro Val Lys Phe Val Pro Gln
515 520 525

Asp Val Pro Pro Glu Pro Lys Lys Ile Pro Ile Arg Asn Thr Arg Thr
530 535 540

Arg Gly Arg Lys Arg Ser Phe Val Pro Glu Glu Glu Lys His Glu Glu
545 550 555 560

Arg Val Pro Arg Glu Arg Arg Gln Arg Gln Ser Val Leu Gln Lys Lys
565 570 575

Pro Lys Ala Glu Asp Leu Arg Thr Glu Cys Ala Thr Cys Lys Gly Thr
580 585 590

Gly Asp Asn Glu Asn Leu Val Arg Cys Asp Glu Cys Arg Leu Cys Tyr
595 600 605

His Phe Gly Cys Leu Asp Pro Pro Leu Lys Lys Ser Pro Lys Gln Thr
610 615 620

Gly Tyr Gly Trp Ile Cys Gln Glu Cys Asp Ser Ser Ser Ser Lys Glu
625 630 635 640

Asp Glu Asn Glu Ala Glu Arg Lys Asn Ile Ser Gln Glu Leu Asn Met
645 650 655

Glu Gln Lys Asn Pro Lys Lys
660

NEU-119.P.1, Sequence Listing

<210> 27
<211> 372
<212> PRT
<213> Homo sapiens

<400> 27

Met Ser Lys Ala Phe Gly Leu Leu Arg Gln Ile Cys Gln Ser Ile Leu
1 5 10 15

Ala Glu Ser Ser Gln Ser Pro Ala Asp Leu Glu Glu Lys Lys Glu Glu
20 25 30

Asp Ser Asn Met Lys Arg Glu Gln Pro Arg Glu Arg Pro Arg Ala Trp
35 40 45

Asp Tyr Pro His Gly Leu Val Gly Leu His Asn Ile Gly Gln Thr Cys
50 55 60

Cys Leu Asn Ser Leu Ile Gln Val Phe Val Met Asn Val Asp Phe Thr
65 70 75 80

Arg Ile Leu Lys Arg Ile Thr Val Pro Arg Gly Ala Asp Glu Gln Arg
85 90 95

Arg Ser Val Pro Phe Gln Met Leu Leu Leu Glu Lys Met Gln Asp
100 105 110

Ser Arg Gln Lys Ala Val Arg Pro Leu Glu Leu Ala Tyr Cys Leu Gln
115 120 125

Lys Cys Asn Val Pro Leu Phe Val Gln His Asp Ala Ala Gln Leu Tyr
130 135 140

Leu Lys Leu Trp Asn Leu Ile Lys Asp Gln Ile Thr Asp Val His Leu
145 150 155 160

Val Glu Arg Leu Gln Ala Leu Tyr Met Ile Arg Val Lys Asp Ser Leu
165 170 175

Ile Cys Val Asp Cys Ala Met Glu Ser Ser Arg Asn Ser Ser Met Leu
180 185 190

Thr Leu Pro Leu Ser Leu Phe Asp Val Asp Ser Lys Pro Leu Lys Thr
195 200 205

Leu Glu Asp Ala Leu His Cys Phe Phe Gln Pro Arg Glu Leu Ser Ser
210 215 220

NEU-119.P.1, Sequence Listing

Lys Ser Lys Cys Phe Cys Glu Asn Cys Gly Lys Lys Thr Arg Gly Lys
225 230 235 240

Gln Val Leu Lys Leu Thr His Leu Pro Gln Thr Leu Thr Ile His Leu
245 250 255

Met Arg Phe Ser Ile Arg Asn Ser Gln Thr Arg Lys Ile Cys His Ser
260 265 270

Leu Tyr Phe Pro Gln Ser Leu Asp Phe Ser Gln Ile Leu Pro Met Lys
275 280 285

Arg Glu Ser Cys Asp Ala Glu Glu Gln Ser Gly Gly Gln Tyr Glu Leu
290 295 300

Phe Ala Val Ile Ala His Val Gly Met Ala Asp Ser Gly His Tyr Cys
305 310 315 320

Val Tyr Ile Arg Asn Ala Val Asp Gly Lys Trp Phe Cys Phe Asn Asp
325 330 335

Ser Asn Ile Cys Leu Val Ser Trp Glu Asp Ile Gln Cys Thr Tyr Gly
340 345 350

Asn Pro Asn Tyr His Trp Gln Glu Thr Ala Tyr Leu Leu Val Tyr Met
355 360 365

Lys Met Glu Cys
370

<210> 28

<211> 71

<212> PRT

<213> Homo sapiens

<400> 28

Met Ala Ala Ala Leu Leu Pro Ser Gly Gln Asn Trp His Asn Thr Gly
1 5 10 15

Phe Ile Leu Glu Ser Asn Leu Thr Asn Val Met Lys Val Val Arg Leu
20 25 30

Phe Ile Lys Cys Pro Cys Leu Trp Gly His Glu Lys Ile His Thr Glu
35 40 45

Ser Ile Lys Asn Val Leu Asn Met Glu Arg Pro Leu Ser Asn Ser Asp
50 55 60

NEU-119.P.1, Sequence Listing

Val Met Lys Val Val Val Phe
65 70

<210> 29

<211> 302

<212> PRT

<213> Homo sapiens

<400> 29

Met Cys Thr Leu Cys Thr Val Met Lys Ser Gly Asn Gly Arg Gly Glu
1 5 10 15

Lys Asp Gly His Pro Leu Thr Ser Ser Leu Lys Ile Pro Thr Ala Ser
20 25 30

Gln Gly Ser Ala Pro Cys Arg Ser Lys Val Gly Val Gly Leu Gly Glu
35 40 45

Met Leu Pro Ile Phe Gln Gly Leu Leu Cys Phe Trp Ser Pro Gly Asn
50 55 60

Arg Cys Cys Leu Glu Leu Trp Arg Glu Gly Phe His Pro Ala Pro Thr
65 70 75 80

Ile Pro Leu Leu Phe His Thr Leu Ala Cys Gly Trp Ser Leu Thr Gly
85 90 95

Leu Val Arg Val Ala Cys Asp Leu Arg Leu Leu Val Pro Gly His Phe
100 105 110

Trp Asn Phe Gly Lys Met Cys Cys Phe Ala Ser Gly Arg Leu Tyr Leu
115 120 125

Val Ala Gly Thr Leu Cys Pro Gln His Thr Phe Phe Cys Asp Ser Arg
130 135 140

Gln Lys Gly Gln Met Gln Lys Gln Asn Gly Gly Lys Ala Val Asp Glu
145 150 155 160

Arg Gln Leu Phe His Gly Thr Ser Ala Ile Phe Val Asp Ala Ile Cys
165 170 175

Gln Gln Asn Phe Asp Trp Arg Val Cys Gly Val His Gly Thr Ser Tyr
180 185 190

Gly Lys Gly Ser Tyr Phe Ala Arg Asp Ala Ala Tyr Ser His His Tyr
195 200 205

NEU-119.P.1, Sequence Listing

Ser Lys Ser Asp Thr Gln Thr His Thr Met Phe Leu Ala Arg Val Leu
210 215 220

Val Gly Glu Phe Val Arg Gly Asn Ala Ser Phe Val Arg Pro Pro Ala
225 230 235 240

Lys Glu Gly Trp Ser Asn Ala Phe Tyr Asp Ser Cys Val Asn Ser Val
245 250 255

Ser Asp Pro Ser Ile Phe Val Ile Phe Glu Lys His Gln Val Tyr Pro
260 265 270

Glu Tyr Val Ile Gln Tyr Thr Thr Ser Ser Lys Pro Ser Val Thr Pro
275 280 285

Ser Ile Leu Leu Ala Leu Gly Ser Leu Phe Ser Ser Arg Gln
290 295 300

<210> 30

<211> 31

<212> PRT

<213> Homo sapiens

<400> 30

Met Pro Val Tyr Gly Ile Asn Pro His Leu Thr Phe Gln Pro Ala Ser
1 5 10 15

Leu Pro Tyr Gly Phe Arg Thr Cys Gln Pro His Asn Ser Leu Lys
20 25 30

<210> 31

<211> 95

<212> PRT

<213> Homo sapiens

<400> 31

Met Leu Ile Glu Asp Val Asp Ala Leu Lys Ser Trp Leu Ala Lys Leu
1 5 10 15

Leu Glu Pro Ile Cys Asp Ala Asp Pro Ser Ala Leu Ala Asn Tyr Val
20 25 30

Val Ala Leu Val Lys Lys Asp Lys Pro Glu Lys Glu Leu Lys Ala Phe
35 40 45

Cys Ala Asp Gln Leu Asp Val Phe Leu Gln Lys Glu Thr Ser Gly Phe
50 55 60

Val Asp Lys Leu Phe Glu Ser Leu Tyr Thr Lys Asn Tyr Leu Pro Leu

65

70

NEU-119.P.1, Sequence Listing

75

80

Leu Glu Pro Val Lys Pro Glu Pro Lys Pro Leu Ala Gln Glu Lys
85 90 95

<210> 32
<211> 261
<212> PRT
<213> Homo sapiens

<400> 32

Met Asp Ser Arg His Thr Phe Ala Pro Ala Ala Met Thr Leu Ser Pro
1 5 10 15

Leu Leu Leu Phe Leu Pro Pro Leu Leu Leu Leu Asp Val Pro Thr
20 25 30

Ala Ala Val Gln Ala Ser Pro Leu Gln Ala Leu Asp Phe Phe Gly Asn
35 40 45

Gly Pro Pro Val Asn Tyr Lys Thr Gly Asn Leu Tyr Leu Arg Gly Pro
50 55 60

Leu Lys Lys Ser Asn Ala Pro Leu Val Asn Val Thr Leu Tyr Tyr Glu
65 70 75 80

Ala Leu Cys Gly Gly Cys Arg Ala Phe Leu Ile Arg Glu Leu Phe Pro
85 90 95

Thr Trp Leu Leu Val Met Glu Ile Leu Asn Val Thr Leu Val Pro Tyr
100 105 110

Gly Asn Ala Gln Glu Gln Asn Val Ser Gly Arg Trp Glu Phe Lys Cys
115 120 125

Gln His Gly Glu Glu Glu Cys Lys Phe Asn Lys Val Glu Ala Cys Val
130 135 140

Leu Asp Glu Leu Asp Met Glu Leu Ala Phe Leu Thr Ile Val Cys Met
145 150 155 160

Glu Glu Phe Glu Asp Met Glu Arg Ser Leu Pro Leu Cys Leu Gln Leu
165 170 175

Tyr Ala Pro Gly Leu Ser Pro Asp Thr Ile Met Glu Cys Ala Met Gly
180 185 190

Asp Pro Gly Met Gln Leu Met His Ala Asn Ala Gln Arg Thr Asp Ala
Page 23

Leu Gln Pro Pro His Glu Tyr Val Pro Trp Val Thr Val Asn Gly Lys
210 215 220

Pro Leu Glu Asp Gln Thr Gln Leu Leu Thr Leu Val Cys Gln Leu Tyr
225 230 235 240

Gln Gly Lys Lys Pro Asp Val Cys Pro Ser Ser Thr Ser Ser Leu Arg
245 250 255

Ser Val Cys Phe Lys
260

<210> 33
<211> 21
<212> PRT
<213> Homo sapiens

<400> 33

Met Pro Gly Tyr Arg His Cys Thr Pro Ala Trp Val Thr Glu Arg Asp
1 5 10 15

Ser Val Ser Glu Lys
20